

[0014] An additional advantage of the label or tag of the present invention is that it provides tamper evidencing.

[0015] A further advantage of the label or tag of the present invention is that it provides a means for imprinting information used by replicators, retailers and consumers.

[0016] A further advantage of the label or tag of the present invention is that it resists embrittlement to function as intended with containers having extended shelf lives.

[0017] Other features and advantages of the present invention will be apparent from the following more detailed description of the preferred embodiment, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0018] FIG. 1 is a perspective view of a CD jewel box having a prior art label or tag.

[0019] FIG. 2 is a perspective view of a CD jewel box having a label or tag of the present invention.

[0020] FIG. 3 is an elevation view of an apparatus for producing the label or tag of the present invention.

[0021] FIG. 4 is a perspective view of a roll of material showing the label or tag produced by the apparatus of the present invention.

[0022] FIG. 5 is a plan view of a label or tag of the present invention.

[0023] FIG. 6 a partial enlarged view of a microperforation of region "A" taken from FIG. 5 of the present invention.

[0024] FIG. 7 is a plan view of an alternate embodiment of the labeled tag or label of the present invention.

[0025] FIG. 8 is an enlarged partial elevation view of material being dispensed from a roll to form the label or tag of the present invention.

[0026] Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

#### DETAILED DESCRIPTION OF THE INVENTION

[0027] Referring to FIGS. 2 and 5, a removable or detachable label or tag 120 for containers is shown. As used herein, the terms label and tag are interchangeable. In one embodiment, label 120 is used to assist in maintaining a container 110 in a closed position. Container 110 typically includes a lid 118 and a base or body 111. Lid 118 is rotatable with respect to base 111 about a hinge 113, defining a hinged end 112, and with container 110 in a closed position, lid 118 contacts an opposed latched end 114. The hinged end 112 and latched end 114 of the container 110 are bridged by two adjacent, substantially parallel, side portions 116. The product, e.g., CD, DVD, video game, etc., which is entirely enclosed within container 110 when lid 118 is in a closed position, is accessed by rotating the lid 118 about hinge 113 away from base 111 to an open position. In a preferred embodiment of the present invention, the container 110 is a container, such as a jewel box, for a CD, DVD or video game. However, it is to be understood that the label or

tag of the present invention can be applied to any type of container requiring a removable label or tag, not necessarily only a rigid container having a hinge or rotatable lid.

[0028] Typically, label 120 is affixed to at least one of the parallel side portions 116 of the closed container 110. Label 120 preferably includes a pair of opposed segments 122 separated by a spine 124 which is defined by a pair of microperforations 128 formed in the label 120. Spine 124 preferably has information indicating the contents of the container and bar code information. However, the spine may not include any information. Preferably, spine 124 is placed over side portion 116 such that microperforations 128 substantially coincide with the edges or corners of side portion 116, and segments or flaps 122 are placed into contact with lid 118 and base 111, such as by folding the segments 122 along the edges of side portion 116. Preferably, an adhesive layer is applied to at least a portion of label 120 to maintain label 120 in this contact position with container 110. However, any method of affixing label 120 to the container 110, such as chemical treatment, heat treatment or fasteners known in the art, may be used which is compatible with the functioning of the label 120. The spine 124 also includes at least one tab or extending portion 130 which extends from at least one end of spine 124.

[0029] Upon grasping a tab or extending portion 130, and pulling away from side portion 116, spine 124 tears substantially along microperforations 128 so that spine 124 is easily removed in one contiguous piece. Upon removal of spine 124, a seam 119 which defines the interface between lid 118 and base 111 is unencumbered, permitting lid 118 to be rotated about hinge 113 with respect to base 111 to an open position for access to the product or item housed therein. While the advantages of this invention will be described with reference to hinged containers, the teachings of the invention are generally applicable to any container on which the label may be placed to prevent access to an item contained within the container, but to then provide improved access to the item within the container upon the removal of the spine, and evidence of tampering with the container if such access is unauthorized. Thus, a container is not required to have a lid, or be structurally rigid, so long as the label functions as intended.

[0030] FIGS. 3-8 refer to a die assembly 210 for forming label 120 comprising a base roller or anvil 212 that is rotatably carried about axis 217 by bearing block 214. Preferably interposed between base roller 212 and bearing block 214 is a gear 216 that is fixed to base roller 212. A cutting die 218 adjacent base roller 212 includes at least one cutter 238, and preferably a plurality of cutters 238, such as three, for forming the profile of label 120 in tape 206 from roll 200 (FIG. 4) that is fed between cutter die 218 and base roller 212. Cutting die 218 further includes at least one, and preferably at least two, die bearers 224 for maintaining a desired spacing between base roller 212 and cutting die 218. Additionally, cutting die 218 includes a gear 222 that is fixed to cutting die 218 for rotatably driving cutting die 218 about an axis 223 by meshing with gear 216 of base roller 212 which is driven by a driving means (not shown). Cutting die 218 is rotatably carried about axis 223 by bearing block 220.

[0031] To control the spacing between base roller 212 and cutting die 218, a roller block 226 rotatably carries pressure rollers 228 which are brought into contact with die bearers